

## **2003-04 Warm Water Fish Management Activity Report**

### **Region 7 (Miles City)**

#### **SE Montana Yellowstone Drainage**

- **Tongue River**
  - Quarterly coordination with the TRR OPS Committee continues. Success is limited as drought conditions do not allow the latitude to implement the “fish-friendly” flows we have been negotiating for. A water Commissioner was secured during 2001 and 2002 but not 2003. A Commissioner has been hired for 2004. Snowpack in the Bighorn range appeared to be plentiful in January but decreased to drought levels by March. The ability to obtain sauger spawning flows did not occur this spring.
  - Negotiations to lease Northern Cheyenne Tribal water for in-stream flow is still an option. Discussions this spring have lead to a tentative offer to lease the Tribe’s water. Many unknowns related to amount of water available, delivery of the leased water and final price need to be discussed.
  - Fish passage at T&Y diversion is scheduled to begin construction this fall. A cooperative effort with USFWS, NRCS, FWP, USBOR, Nature Conservancy and the T&Y Irrigation District has resulted in land being purchased on the West side of the river to facilitate construction. Final plans are being prepared by the USBOR engineer in Denver.
  - Coordination with the USGS/BOR on the T&Y Diversion monitoring program for last year and the upcoming season continues. Personnel from the T&Y district, trained by BOR project staff, will be monitoring fish entrainment with limited help from R-7 personnel.
  - Fish passage and entrainment at the SH and Mobley Diversions. There is an opportunity to work with the Amish landowners of the Mobley Diversion in construction of a fish passageway. The Mobley Diversion was destroyed during spring ice-out during spring, 2003. The Conservation District issued an emergency 310 to assist the irrigators. An on-site visit with BOR engineers determined a preliminary design that would work to provide irrigation and fish passage needs. Further engineering design efforts need to be accomplished. Funding partnerships should be easily developed. Passage at the T&Y needs to be accomplished first. Passage at SH Diversion will need to be addressed after these others are addressed.
  - Monitoring of restocked RBT & BNT trout in the TRR tailrace fishery will be done again this summer. Angler satisfaction seems to be high in this section and reports of nice BNT and RBT are prevalent. Drought flows and low winter flows have limited this fishery.

- TR Baseline Survey. Regional fisheries crews will survey main-stem TR to collect base information before CBM impacts occur. Work to occur July –Aug. This effort was completed during 2003 and will be conducted again in 2004.
  - Coal Bed Natural Gas Development. Currently Don Skaar and Bryce Christensen are members of the Inter-Agency Working Group that provides direction to various State and Federal Agencies tasked with monitoring CBNG development impacts. Brad Schmitz is a member of the Aquatics Task Group, providing monitoring design and schedules to the IWG. These planning efforts take an immense amount of time.
  - Prairie Stream Surveys for CBNG. The regional crew assigned to PS surveys collected baseline data in approximately 20 sites in the Tongue, Rosebud and Powder drainages during 2003, in order to gain information on fish abundance and distribution before CBNG impacts occur. These efforts will be repeated in May and July of 2004.
- Tongue River Reservoir
    - Annual trend gillnetting occurred during August, 2003. The crappie population was very abundant and should produce 10" fish this season. Standard gillnet and beach seine sampling will continue for this field season. Bullhead abundance is high and seems to be impacting stocked walleye survival. Anglers are concerned about the reduction in WE numbers. Brad met with the Sheridan, WY chapter of WU this past winter to discuss management of the TRR fishery.
    - Walleye recruitment is being evaluated by Oxy-tet treatments to stocked fry. Last season was the 4th of 4 years. Fingerlings were treated in 2003 and will be treated in 2004. This effort coincides with a similar effort occurring at Fort Peck. The Peck crew have volunteered to read any otoliths collected from the TRR. Results from 2002 indicated a 50% mark rate on small walleye and a 30% on fish from 2003 (small sample sizes).
    - Reservoir elevations were high and relatively stable during 2003. Conditions were optimal for a successful spawn of multiple species. Sampling during 2004 will indicate if this is the case. Snowpack in the Bighorn drainage associated with this reservoir is very poor for 2004. We are expecting very low reservoir elevations which may result in great impacts to the fishery. Coordination with the TRR Operations Committee is on-going.
    - Increased pressure at the TRR State Park in the past few years, and especially since the re-build of the park facilities will necessitate an updated creel effort during the next few years.
    - The TRR chapter in the YSR drainage report have been completed and are current.

- An increasing interest in holding fishing tournaments at the TRR is of concern based upon the high pressure this system sustains. Social tolerance of these events at this water is low.
- Experimental sauger stocking and monitoring will continue for the next few years with the intention of establishing a self sustaining population of sauger. Sauger management will eventually replace walleye stocking.
- Fish kills were reported twice in 2003. This not uncommon but with the advent of CBNG these report have increased. Backes conducted an investigation of the kill reported during the winter of 2003 using an underwater camera and found no dead fish but plenty of zooplankton.

## Yellowstone River

### *Species issues*

- **Pallid Sturgeon.** Majority of tracking and monitoring work is coordinated through R-6 efforts. Region 7 continues to participate in recovery team efforts, Inter-state coordination, disease issues and coordination with USFWS/ND G&F. Region 7 personnel will collect SNS during the 2004 spawning run for sturgeon drift research conducted by USGS. Our partnership with the FWS, WAPA and BOR along with re-allocation of funds and FTE within the Division has resulted in the hire of a Yellowstone River Biologist to be stationed in Glendive, MT. This individual will conduct pallid research as well as management biology on other YSR species.
- **Blue Sucker.** Monitoring through annual, multi-species, monitoring efforts (spring and fall electrofishing ) continue. Future efforts to define this species characteristics will be folded into responsibilities of the Lower Yellowstone River biologist. SWIG dollars may be utilized to provide telemetry information on this species. Tissue samples will be collected in 2004 in response to a request from the U of Nebraska who is conducting a range-wide genetics survey of the fish.
- **Cyprinids. Sicklefin chub, Sturgeon chub, Western Plains minnows,** etc, monitoring through annual multi-species trend sampling efforts continued.
- **Sauger** Efforts to spawn sauger were successful this spring. Progeny will be stocked into the TRR.
- The graduate research conducted by Matt Jeager was concluded this past year and a copy of his thesis was sent to the regional fisheries staff. Results of this study will help determine further sauger research. Coordinated efforts to continue sauger research should include the Lower YSR biologist and MSU coop unit staff. SWIG dollars may be used to further this work.
- We are participating in a range wide sauger genetics study through Troy State University, AB. Samples need to be collected from the upper Powder River, Upper Tongue and the Yellowstone River above

Cartersville Diversion. Low flows have curtailed these efforts in past years.

- **Paddlefish** - Calculated paddlefish harvest was 1,060 fish at the Intake Diversion during 2003. In spite of a poor water year in 2003, timing of mountain snowmelt and the associated increase in flow concentrated paddlefish at the Intake Diversion site early in June resulting in high harvest rates which initiated a closure of the season on June 7, 2004.
- A phone creel was conducted during fall-winter of 2003 to determine the amount of off-site harvest (fish not caught at Intake but part of the YSR/Lower Mo. River population). Results indicate a 20-30% off-site harvest of fish, validating a closure of PF harvest at Intake once total harvest approaches 700-800 fish. Other interesting information from this survey indicates that anglers caught over 1000 PF in the upper Mo. River fishery.
- Annual coordination meetings with ND G&F occurred last month. Continued refinement of ND regulations will be implemented to spread harvest opportunity within that State. A change in MT PF regulations consolidated season opening dates to May 15. Previous years had part of the YSR season opening on May 1.
- Creel and C&R programs will occur this year as per last season. A post—season phone creel will be conducted again in 2004 to determine non-Intake harvest.
- Coordination with D. Scarnecchia on research issues and data compilation is on-going.
- Paddlefish harvest may be very poor this year with the minimal snow pack in the YSR drainage.

#### *Habitat issues.*

- Passage and entrainment-**Intake Diversion**. Coordination with BOR, ACOE and the LYIP continues but has been reduced as the Federal agencies look for funding for the project.
- Title transfer on Intake Diversion. This effort continues and is tied directly to solutions to the entrainment and passage problems. Coordination with the BOR et al. will continue.
- Passage and entrainment-**Cartersville Diversion**. Very minimal communication has occurred with this habitat problem. Private ownership and an unwillingness to coordinate on the part of the irrigation company have diminished this project. The local NRCS staff have been exerting some pressure and education to help move this project forward.
- **Stream Alteration** (310/124 laws). Multiple projects were reviewed and inspected this past season. Of note is the multiplication of center pivot irrigation systems along the YSR and the increased production of new irrigated ground. These systems are billed as being environmentally neutral based upon the idea of water savings but there is some skepticism about the validity of this point. Water depletion in the YSR continues and is becoming a bigger problem. Of concern is the number of un-authorized

projects that are occurring across the region (Helm Bridge, Little Mo. River Dam, no 310's from Richland County in over 2 years)

- West Crane Irrigation Project did not materialize during the past year.
- Continued efforts to investigate entrainment in diversions and impacts due to pump-irrigation systems need to be addressed on the YSR system.

#### *Flow issues*

- Drought impacts on the TR, Powder and YSR has R-7 staff involved in many drought related discussions. The ability to improve in-stream flows in the region are minimal but continue to be a priority.

#### *Small tributaries.*

- Cooperation with Mark Barnes continues. Mark focused his efforts on O'Fallon Creek last year and will move to 14 mile Creek this year. Studies from MSU gave us some very general species location data for some of the small trib streams in the region.
- The prairie stream crew was hired and is currently operating in it's 2<sup>nd</sup> year within the region. The hiring and training of this crew took a substantial amount of time this spring. Landowner resistance toward this program is being felt in some areas of the region. Much good data has been collected. Site selection for 2004 will include some repeat work on CBNG area streams.

#### *Walleye egg-take operation.*

- Region 7 personnel were again able to assist the R-6 crew in obtaining walleye source for statewide fish management. Regional demands associated with sauger spawning took some of the staff time historically allocated to the egg take project as did the inability to acquire seasonal help during the spawn time period. The result was less people from R-7 being sent to the egg take operation.

#### *SE Montana Warm Water Lakes*

- Drought impacts on regional ponds are severe across the region. Most of our precipitation dependant ponds are non-functional after 5 years of drought. Pond surveys occurred on 30+ ponds during 2003 and are scheduled for approximately as many this season.
- A pond data base was developed and improved upon this past season. Efforts to use this tool to develop the annual pond booklet was successful and an electronic version of the pond booklet complete with locational maps was used to publish the booklet for public availability. This format has been favorably accepted.
- The segment of the annual Federal Aid report relating to pond management was completed for the 2003 season..
- Coordinate with agency personnel on larger systems and urban ponds such as Baker, Castle Rock, Hollecker Lake and South Sandstone Reservoir occurred last season and will again this season. Dam inspections were performed at S. Sandstone, Johnson and Gartside reservoir.

- Urban fisheries efforts continued last season with R-7 staff stocking Cook Lake in Miles City and Hollicker Lake in Glendive. Hollicker Lake continues to be a marginal fishery and Cook lake will not be filled this year.. Spotted Eagle pond in Miles City has potential to be improved dependant upon Miles City regulations on boat usage. A visit to the Mayor's office to coordinate a habitat project at Spotted Eagle was conducted this past winter. Continued coordination with the City will occur.
- Gartside Reservoir near Sidney, MT was drained this spring to repair leaking outlet works. Impacts to the fishery are yet to be seen.

### Prairie Stream Survey

- This project is funded by SWIG funds and is in its 2<sup>nd</sup> year of existence. Efforts in 2003 resulted in over 70 sites evaluated. Many of these sites were dry, primarily due to drought but other factors such as changes in land use practices and increased irrigation use may be impacting these small stream systems. 33 species were captured and identified across the region as surveys were conducted.
- Cindy Sampson was hired as the PSC leader for 2004. Cindy worked on the PSC in R6 last year and brings to our team maturity and experience.
- Plans for 2004 include repetitive sampling of some sites located in CBNG areas and original surveys in the Carter county to Wibaux county areas.

### Paddlefish

- See Paddlefish under Yellowstone River.
- The paddlefish angler creel program was again conducted during the past field season. This effort is ongoing and will occur again this year. Continued assistance to D. Scarnecchia during spring paddlefish season will occur.
- The catch and release season is also ongoing and will occur to provide additional angling opportunities and tagged fish. Interstate coordination and management of paddlefish population is ongoing and will continue.
- The inter-state management plan harvest target was reduced to 2000 fish total with 1000 fish being available for harvest within each state. This effort moved through the public process very smoothly.
- The Glendive Chamber of Commerce were successful in implementing legislation that reduced FWP's share of the caviar sale proceeds. The bill also increased the legal area that roe could be donated from.
- The Annual Federal Aid report for this project is complete
- Netting and tagging efforts will occur this spring as flows allow.

### Administration

Although difficult to capture, much of the regional staff time goes into the daily administration duties needed to facilitate the public need and run a fisheries management program in SE Montana. The following are some of the duties that seem to take much of our time in this capacity.

- FWP Administrative meetings. Admin-Fish manager meetings, regulation committee, leadership conference, commission meetings, CBNG coordination etc.
- Training–AFS, Great Plains fish workers conference, Computer training, GIS, etc.
- Misc. Admin-Phone calls, legislative needs, letters to citizens, assisting on hiring committees, regional assignments, interagency coordination, etc.
- Program administration-Vehicle use and tracking, annual reports, budget needs etc.
- Private and commercial fish pond licensing and associated EA's.
- Other “black hole” items
- Educational programs and outreach, kids fishing days, etc. A phone creel was conducted during fall-winter of 2003 to determine the amount of off-site harvest (fish not caught at Intake but part of the YSR/Lower Mo. River population). Results indicate a 20-30% off-site harvest of fish, validating a closure of PF harvest at Intake once total harvest approaches 700-800 fish. Other interesting information from this survey indicates that anglers caught over 1000 PF in the upper Mo. River fishery.
- Hiring process to acquire seasonal staff, LCA biologist, etc.